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BY _____

January 6, 2021

Mr. Mike Sundberg
New York State Department of Environmental Conservation
Office of Environmental Quality, Region 5
232 Hudson Street, Post Office Box 220
Warrensburg, New York 12885-0220

Regarding: Notification of Status Compliance Report for Sterigenics - Queensbury
NYDEC Permit Number 5-5344-00029/00011

Dear Mr. Sundberg:

Enclosed is the Notification of Status Compliance Report for the Sterigenics U.S. LLC facility located at 84 Park Road, Queensbury, New York as required per 40 CFR Part 63, Subpart O – National Emissions Standard for Ethylene Oxide Emissions Standards for Sterilization Facilities.

Please contact me should you have any questions regarding this letter or the attachments. You can reach me by phone: 630.928.1724 or email lhartman@sterigenics.com

Kind Regards,

Laura Hartman
Manager, Environmental Health and Safety

Enclosures: Notification of Compliance Status report

Pc: EPA Region II, Director, Air and Waste Management Division
Attention: Director Air and Waste Management
290 Broadway
New York, New York 10007-1866

General Manager



NOTIFICATION OF COMPLIANCE STATUS

Applicable Rule: 40 CFR Part 63, Subpart O – National Emissions Standard for Ethylene Oxide Emissions Standards for Sterilization Facilities

1. Facility name and contact:

Sterigenics U.S. LLC – Queensbury, New York Facility- Permit Number 5-5344-00029/00011
84 Park Road, Queensbury, New York 12804

2. Methods used to determine compliance:

A Performance test of the facility's catalytic oxidizer was conducted on November 13, 2020 in accordance with the test methods stated in 40 CFR 63.365 for Ethylene Oxide Sterilization Facilities. The tests conformed to test methods presented in the applicable regulation (40 CFR Part 63, Subpart O).

3. Results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted:

The annual performance test was conducted on November 13, 2020 to determine compliance with the following requirements:

- The emissions from the sterilization chamber exhaust vents (back vents) must be discharged to control equipment with an EtO emission-reduction efficiency of at least 99.0% by weight.
- The emissions from the aeration process must be discharged to control equipment with an EtO emission-reduction efficiency of at least 99.0% by weight, or which reduces the EtO concentration at the emission-control outlet to less than 1 ppm.

The catalytic oxidizer was found to have an average EtO control efficiency of 99.8194 percent for back vent and an average EtO control efficiency of 99.9388 percent for aeration. During the testing, the catalytic oxidizer was operated at 297°F during back vent testing and 295° during aeration testing. In accordance with state and federal requirements, back vent and aeration discharge streams must be vented to control equipment with an EtO emission-reduction efficiency of the above noted requirement. The Queensbury facility catalytic oxidizer met this requirement.

The performance test shows that Sterigenics' Queensbury facility is in compliance with the operating permit and the applicable NESHAP regulation.



4. Methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods:

To ensure continued compliance, Sterigenics' will measure and record the level of scrubber liquor in the recirculation tanks at least once per week. In addition, the facility will continuously measure the outlet temperatures of the catalytic oxidizer.

5. Type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard:

The Queensbury facility uses greater than 10 tons of ethylene oxide per year to sterilize medical equipment. The Queensbury facility used 361,454 pounds of ethylene oxide from December 2019 to November 2020. About 95% of the ethylene oxide used at the facility is discharged through the sterilization chamber vents (from the vacuum pumps) and the remaining 5% is discharged through the aeration vents and sterilizer exhaust vents (back vents). The sterilizer chamber vent emissions routed to the scrubber would be about 343,381 pounds. With 99.945% control efficiency, the resulting emissions from the scrubber would be about 189 pounds of ethylene oxide. With 99.9388% control efficiency for the aeration vents and 99.8194% control efficiency for the back vents, the resulting emissions from the catalytic oxidizer would be about 15 pounds of ethylene oxide. Therefore, the facility emitted an estimated 204 pounds of ethylene oxide point source emissions during December 2019 – November 2020.

6. Analysis demonstrating whether the affected source is a major source or an area source (using the emissions data generated for this notification):

Based on the above emission analysis, the facility emits less than 10 tons/year of ethylene oxide and is an area source.

7. Description of the air pollution control equipment (or method) for each emission point, including each control device (method) for each hazardous air pollutant and the control efficiency:

The air pollution control equipment used to control the ethylene oxide emissions from the sterilizer chamber vents (from vacuum pumps) is a wet acid scrubber system. This scrubber converts the ethylene oxide to an aqueous ethylene glycol solution. As shown during the 2017 compliance test, the scrubber has a control efficiency of about 99.945%.

The air pollution equipment used to control ethylene oxide emissions from the aeration vents and back vents is a catalytic oxidizer. This catalytic oxidizer burns or oxidizes the ethylene oxide to carbon dioxide and water. As shown during the 2020 compliance testing, the catalytic oxidizer has an average control efficiency of about 99.9388% and 99.8194% for the aeration rooms and back vents respectively.

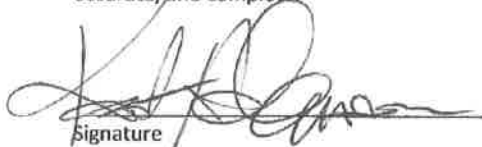


8. Statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements:

To the best of our knowledge, the Queensbury facility has complied with this relevant NESHAP standard, 40 CFR Part 63, Subpart O.

Certification Statement:

To the best of the undersigned's knowledge, information, and belief formed after reasonable inquiry, the information submitted in this notification of compliance status for Sterigenics Queensbury facility is true, accurate, and complete.


Signature

Vice President EH&S

Title

Kent Adamson

Print Name


Date